



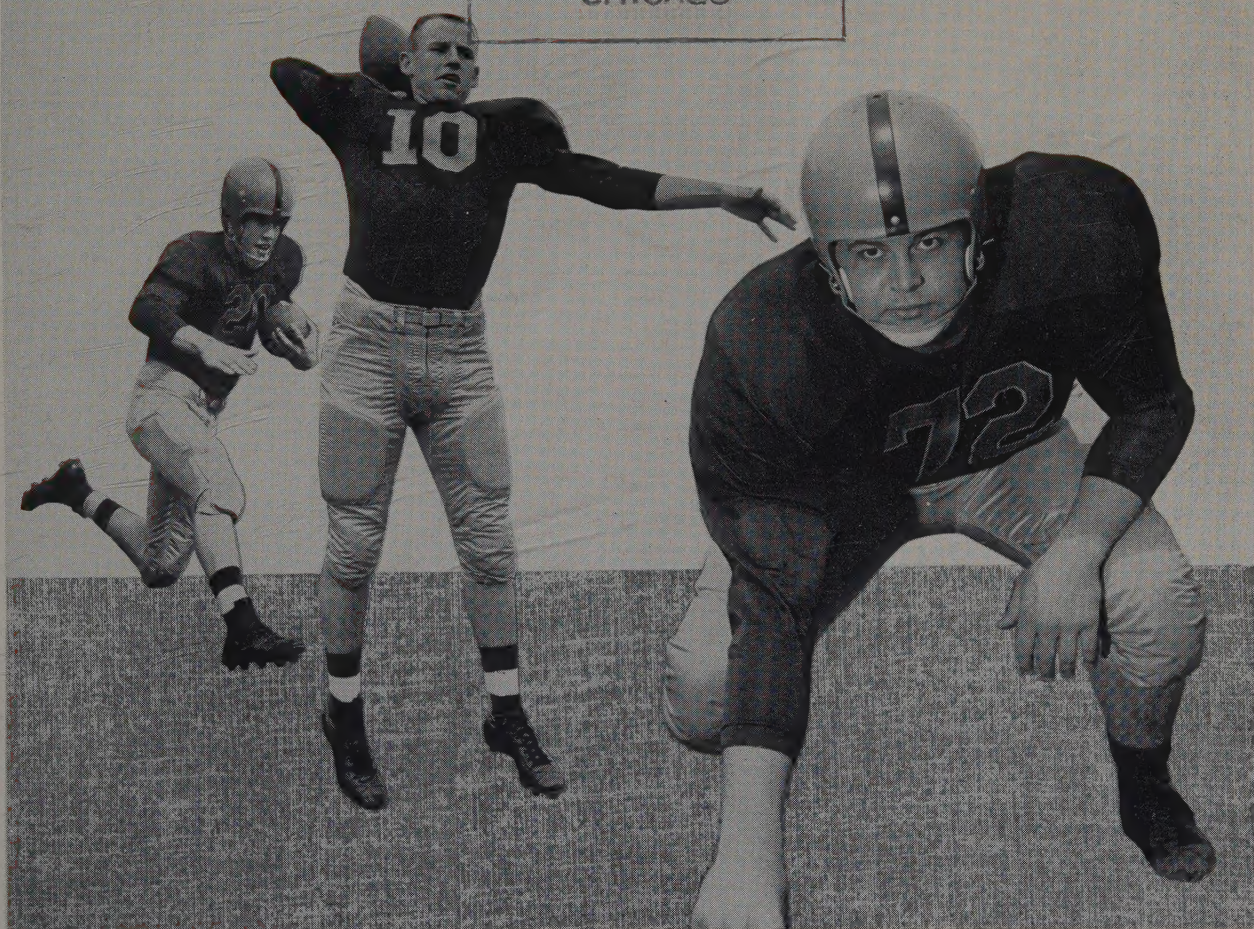
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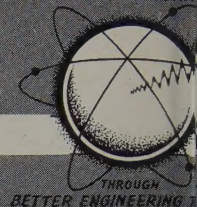


# THE ILLINOIS ENGINEER

ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Incorporated

Affiliated with the National Society of Professional Engineers

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Employment Practices—Carlos Hidalgo  
Ethics and Practice—Robert A. McClevey, Jr.  
Fees and Salaries—Robert E. Schwartz  
Legislation—George L. Farnsworth, Jr.  
Young Engineers—Ralph C. Hahn

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Civil Defense—Charles S. Monnier  
Inter-Professional Relations—W. M. Francis  
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## 75th Convention

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## A COMMENDABLE DECISION



D. S. Magowan, I.S.P.E. President

Sidelined by a heart attack soon after the 74th annual meeting in Rockford, ISPE President D. S. Magowan felt that he had been unable to give sufficient time to the responsibilities of his office. On November 7 he submitted a letter of resignation to the Board of Direction.

The Board took cognizance of the long and faithful years of service Magowan had devoted to the affairs of ISPE. He is the only person to earn the distinction of having been President of three different Chapters of the Society.

Prior to becoming State President, Magowan had served as leader of Capital, Chicago and DuKane Chapters. The Board unhesitatingly tabled the resignation request and sent in a capable substitute, L. D. Hudson, as Acting President to carry the ball for Magowan. The Board selected Harold F. Sommerschield as Special Assistant to assume Hudson's duties as Vice-President of the Operations Group.

This action will allow President Magowan to enjoy the honor of a full term as President without the physical burdens which could jeopardize his complete recovery.

Keeping "Mac" as titular head of the Society in a role of "elder statesman" is a Commendable and Wise Decision. Mac's friendly smile and effervescent personality has been and will continue to be a steadying influence and inspiration to the Society.

## Editorially Speaking—

# "PLAN BIG"

During a recent visit to the office of Senate Minority Leader Everitt Dirksen, a quotation was observed which expresses a philosophy that could be accepted as the watchword for all ambitious organizations or individuals. It seems to be particularly adaptable to the expansive spirit of ISPE:

*"Make no little plans; They have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded, will be a living thing, asserting itself with ever growing insistency. Let your watchword be order and your beacon beauty."*

Mrs. Glee Gomien, Personal Secretary to Senator Dirksen, advises that the quotation is from a speech made in London in 1910 by Daniel H. Burnham, who, among other things, was the architect of Union Station and a member of the 1901 Commission on the Nation's Capital which revised the L'Enfant plan for Washington.

## THE COVER PICTURE

Three Engineering Students made outstanding contributions to a great football year at the University of Illinois. Left: Doug Wallace from Elgin was a dependable backfield man. He is a Civil Engineer Student. Center: Russ Martin from Carbondale, Civil Engineer; and right: Darrell DeDecker from Atkinson, Electrical Engineer. DeDecker was outstanding on defense in Illinois' final game against Northwestern which Illinois won 28-0.

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## MEMBERSHIP SURVEY TO FORMULATE I.S.P.E. POLICIES

T. D. GAZDA, *Chairman, Policy Research Committee*

In order to put forth the official policies of ISPE currently guiding its activities, the State Board has appointed a Policy Research Committee to develop specific statements of policy.

When these statements are completed and approved by the board, they will be printed in a policy booklet in readily useable form and will present the Society's current stand on various topics, some of which are listed herein. The policy booklet will serve as a means of informing the members of the engineering profession and the lay public of those professional policies which are intended, in all cases, to advance the interests of the public welfare and the engineering profession.

Since statements of policy must reflect the feelings of the membership, it has been decided that these proposed policy statements will be presented to the membership for general review by publishing them in the ILLINOIS ENGINEER. We intend to publish such statements monthly so as to give the entire membership sufficient opportunity to edit, to comment, and to add to these statements. *In fact, the Policy Research Committee herewith challenges the entire membership* to not only study and give serious consideration to the statements as proposed, but to think-up and develop additional statements that should be of concern to ISPE. ISPE can only be as effective as its membership makes it.

Members are urged to make their opinions on these policy statements known by discussing them at chapter meetings, by contacting chapter officers, by writing letters to the editor, or by any other available means.

Following is a proposed statement of policy relating to building and construction codes. The statement is general in nature and perhaps should be qualified. Specific critical areas of interest should be spelled out. We need to know what these are (in the eyes of the membership) before we can propose a specific all inclusive policy to guide future State Board action. Please give us your thinking on this subject as soon as possible.

"It is the position of ISPE that the State of Illinois should have a Uniform State Building Code that will incorporate the best known principles of modern engineering science, materials, and practice to more adequately protect the public health, safety, and welfare. The code should include all facilities pertaining to and reasonably incidental to building construction. The code should contain provisions for adequate State and Local enforcement and should be flexible in administration so as to be capable of evaluating and incorporating new materials and methods in the future. The Code should not include individual family residences except in very special cases where local conditions require con-

struction control to protect the health, safety and welfare of the entire community."

In order to assist us in preparing a statement of policy on ethics and practice, we wish to receive your thinking on the following question.

"Should the ethics and practice committee attempt to interpret the law, or should they be specifically directed not to interpret the law, whenever they deal with a matter pertaining to the practice of engineering?"

Following is a partial list of suggested topics for future statements of policy. Please comment on any of these that you may wish. *We need your thinking.*

1. Education
  - a. student chapters
  - b. engineering clubs in high schools
  - c. career guidance in high schools
  - d. establishment of additional engineering technical schools and colleges
  - e. registration of university and college professors
2. Ethics and Practice
  - a. competitive bidding
  - b. telephone listing
  - c. use of engineers' seal
  - d. use of P.E. as title
  - e. display of license
  - f. free engineering by industrial, sales, and contractor groups
3. Fees and Salaries
  - a. encourage use of ISPE schedule by members
  - b. promote only those schedules which are developed solely by ISPE committees
4. Legislation
  - a. relationship to Illinois Engineering Council
  - b. procedure, and type of legislation
5. Young Engineers
  - a. relation of technical school graduate, foreign student, and draftsmen to young engineers
  - b. part time employment and consulting by government employed engineers
  - c. maintenance of high standards of professional engineer's examination
  - d. grades of membership based upon or length of service to relieve young engineer of some of the increased financial burden
6. Civil Defense
  - a. responsibility of individual engineer and ISPE toward civil defense activities
7. Public Relations
  - a. need for engineers to establish, promote and maintain good public relations
  - b. registration required of heads of government agencies directing engineering activities
8. Membership
  - a. who should belong or should not belong to ISPE



9. Functional Sections
  - a. purpose
  - b. membership
  - c. specific problems of individual sections
10. Registration
  - a. by reciprocity
  - b. by eminence
11. Budget and Finance
  - a. funds must be provided to insure action by ISPE other than normal housekeeping
12. How about it? Can you think of other activities that should have statements of policy?

Have YOU  
Asked Another Engineer  
to Join I. S. P. E.  
?

### KEOGH-SIMPSON FILMS AVAILABLE

Three new sound films, designed to present the story of H. R. 10 in an effective and interesting manner, are offered free to ISPE Chapters for showings to Consultants or other non-salaried groups.

The Keogh-Simpson measure, a self-employed retirement bill, which would permit self-employed individuals to annually deduct up to \$2,500 of their income for retirement purposes, has passed the House of Representatives and is now pending in the Senate Finance Committee. When Congress returns in January, 1960, the campaign to have the Committee favorably report H. R. 10 will move into high gear. The bills' sponsors are hopeful that the measure can be reported out early in the forthcoming Congressional session.

These films have been prepared by the American Thrift Assembly to inform self-employed persons of the details of this legislation, and to indicate its many benefits.

Each film is ten minutes running time and is based on interviews with leading proponents of the legislation. 1 — Is a film interview with Senator Smathers of Florida. 2 — Shows Senators Smathers and Moss, from Utah, and 3 — Senator Allott, of Colorado, has as his guest Representative Simpson (Pa.), co-sponsor of H. R. 10.

Any ISPE group interested in the films should contact the ISPE headquarters for order forms.

### I.S.P.E. STARTS SEARCH FOR SECOND SCHOLARSHIP WINNER

ISPE chapters again have the special opportunity of assisting a worthy high school senior interested in civil engineering to attend four years of college.

The Armco Drainage and Metal Products, Inc., is continuing to cooperate with NSPE and \$15,000 has been granted by the ARMCO Foundation, Inc., providing five scholarships of \$3,000 each (\$750.00 per year for four years). These scholarships will start during the fall of 1960 and the recipients are to be selected from high school seniors during the 1959-60 school year.

Last year, Arthur Beazley from Arcola, Illinois, was one of the first year scholarship winners and is now attending the University of Illinois. Beazley was sponsored by the Champaign Chapter of ISPE. After winning the National Award, young Beazley was extended recognition by the Illinois Legislature and was personally greeted and congratulated by Governor William G. Stratton (see ILLINOIS ENGINEER, June, 1959).

Each chapter of ISPE is urged to publicize the availability of these scholarships to high schools in their area, and to solicit applications from candidates. The necessary publicity material and all required forms have been sent from NSPE. Each local chapter will select from these applications the *one candidate* whom they wish to recommend as best qualified. Send the application of the selected candidate to the ISPE Education Committee chairman.

The Education Committee is determined to find another Illinois winner, therefore, every Chapter should start early to screen local candidates.

CHAPTER SELECTIONS with completed information Forms must reach ISPE HEADQUARTERS by January 15, 1960.



# ENGINEERS WARNED OF UNION

The Chicago Chapter of the Illinois Society of Professional Engineers and the National Society of Professional Engineers arranged a meeting with an eye on the current situation at Western Electric Company. (The National Labor Relations Board will give 1,793 Western Electric engineers an opportunity in the near future an opportunity to vote on whether they wish to be represented by a union. The date of the election is expected to be announced shortly by the N.L.R.B.)

The engineering chapter vice president, Gerald Marks, admitted there is a growing feeling in his organization against joining unions.

"The individual responsibility, independent judgment and initiative required of a professional engineer are incompatible with the regimentation fundamentally inherent in unionization," Marks said. "Furthermore, it is a violation of the engineers' code of ethics and is contradictory to the creed of the professional engineer."

## I.S.P.E. AND N.S.P.E.

### LABOR RELATIONS POLICIES

C. J. McLEAN, *National Director*

The National Society of Professional Engineers through its Engineers in Industry Subcommittee has been helpful in the de-certification of some engineers from union organizations. The publicity attending these successes has raised false hopes in the many minds that NSPE has a magic formula in these matters.

If members of the Society will study the subject of Labor Relations carefully they will find that long established NSPE policies and programs, when intelligently applied, have produced the results. Too few members of NSPE know what these policies are. We quote below from "Professional Policies" published by NSPE July 1, 1958, regarding Labor Relations.

#### Policy No. 26—General Principles

The principles set forth below shall govern the consideration of labor relations problems as applied to specific cases or legislation:

1. No professional employee should be forced, against his desires, to join any labor organization as a condition of his employment or to sacrifice his right to individual, personal relations with his employer in matter of employment conditions.

2. Any group of professional employees, who have a community of interest, and who wish to bargain collectively, should be guaranteed the right to form and administer their own bargaining unit and be permitted free choice of their representatives to negotiate with their employer.

3. No professional employee, or group of professional employees, desiring to undertake collective



Shown at Chicago Chapter Labor Relations meeting left, John Dolio, P.E., and Robert E. Ackenberg, Jr., attorney, formerly with N.L.R.B.

bargaining with an employer, should be forced to affiliate with, or become members of, any bargaining group which includes nonprofessional employees, to submit to representation by such a heterogeneous group or its designated agents.

#### Policy No. 27—Collective Bargaining By Professional Engineers

It is definitely unprofessional for a professional engineer, professionally employed, VOLUNTARILY join a heterogeneous labor union, dominated by, or obligated to nonprofessional groups. As stated by the Society, through its Board of Directors at Oklahoma City in September, 1948, "The individual responsibility and independent judgment required of a Professional Engineer are incompatible with the regimentation fundamentally inherent in unionization."

Nothing in this statement of principle shall be construed as a criticism of engineers who may be forced to join a labor union, against their will, but engineers in this predicament should seek to extricate themselves by due process of law.

Nothing in this statement of principle shall be construed as a criticism of engineers-in-training, who voluntarily join a labor union when, as a step in their practical engineering training, they are temporarily employed in nonprofessional or subprofessional work, when their fellow workers are organized. When promoted to professional responsibilities, however, the engineer cannot continue his labor affiliations without sacrifice of professional status.



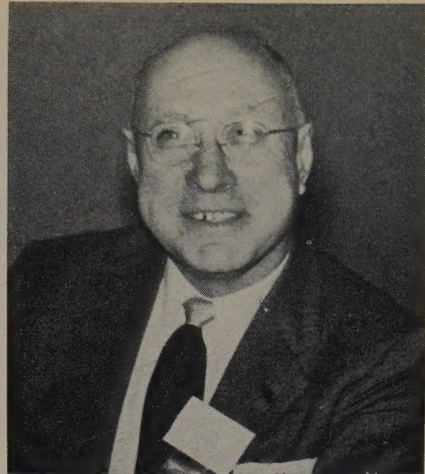
### Policy No. 28—Professional Provisions of Taft-Hartley Act

The so-called professional provisions of the Taft-Hartley Act, specifically Section 9 (b) (1), which grants professional employees the right of a separate vote to determine their desires, and Section 2 (12), which defines "professional employee," have been and are of the utmost importance to professional engineers. These provisions of the law should be retained in any new national labor law which may be adopted, or in any legislation amending the present law.

The professional provisions of the Taft-Hartley Act should be utilized by registered professional engineers as a means of avoiding regimentation into unions.

NSPE favors the retention of Taft-Hartley Law safeguards to professional employees in the construction industry; the retention of the Taft-Hartley prohibition of the Closed Shop as it affects professional employees; and retention of Taft-Hartley provisions for decertification elections as it affects interest of professional employees.

NSPE favors an amendment to the Taft-Hartley Act to facilitate the freedom of association of professional engineers in employee and supervisory capacities.



Cecil J. McLean

In order to implement these professional policies in particular industries, the "Administrative Policies" published by NSPE in 1958 includes a formula for intra-plant communication through "Sounding Boards."

### Policy No. 35—Sounding Board Organizations\* —Encouragement Of

\*As presently constituted and as used herein, a "sounding board organization" is defined as a non-bargaining association of engineers, including those in management, employed by one employer, whose purpose is to improve communications between professional engineering employees and management by serving as an objective fact-finding body, and whose activities are carried out in accordance with the professional concepts of NSPE.

NSPE recommends to its state societies that they encourage sounding board organizations in their areas to become affiliated with local chapters of the professional engineering society in a manner similar to functional sections, consistent with local, state and National Society constitutions. These affiliated groups or sections may include members who are not registered, but these members shall have no vote in the local, state or National Society activities except as allowed in the local or state constitutions.

At a meeting in Chicago on Thursday, October 22, concerning engineers and unions, questions regarding the NSPE policies were raised which indicated that members do not have a clear understanding of these matters. Sounding Boards were mentioned by the speaker but this was a new term to many present, and these boards were unfortunately confused in the minds of many as labor "union" equivalents for professional engineers. They are definitely non-bargaining groups.

It is hoped that members of ISPE will carefully read the above policy statements. A knowledge of what they contain will clear up any misunderstandings about the NSPE position which unfortunately have developed as a result of the Chicago Chapter Meeting on Oct. 22.



Shown at Chicago Chapter Dinner. Left to right: Robert G. Silander, Israel Katz and Paul Pearson. Waitress unidentified.

### Policy No. 29—Minimum Labor Standard Laws

Federal laws which establish minimum standards in the field of wages and hours of work applicable to employees of Government contractors do not, and should not, cover professional employees. Proposed amendments to such laws, specifically referring to the Walsh-Healey Act and the Davis-Bacon Act, which would add architects, technical engineers, draftsmen and technicians to those covered by such laws, are not favored if the occupational groups to be added include professional employees as defined in Section 2 (12) of the Taft-Hartley Act. The exemption of such professional employees should be continued if any amendments are adopted.



## N.S.P.E. TO PRESENT INDUSTRIAL PROFESSIONAL DEVELOPMENT AWARD

An Industrial Professional Development Award will be presented annually by the National Society of Professional Engineers to the industrial employer of engineering personnel which has made an outstanding contribution to the advancement and improvement of the engineering profession through its employment practices.

The first award will be presented by the NSPE president at the annual meeting of the 50,000-member group in June, 1960, in Boston.

The two-fold purpose of the award is to "give adequate recognition to the firm which has demonstrated the application of forward-looking engineering employment practices, and to encourage industrial employers of engineering personnel to adopt progressive engineering employment practices in accord with established professional standards," Harold A. Mosher, NSPE president, stated in announcing the award at the National Society headquarters in Washington, D. C.

Mr. Mosher said the award was "a part of the continuing NSPE program to aid in the enlarging of opportunities for professional growth among engineers employed in industry." The National Society president added that one of the important factors in the annual

award will be the "widespread dissemination of information about some of the excellent professional development programs now available to engineers in industry."

Nominations for the award will be submitted by local chapters of the National Society. The NSPE Industrial Award Committee will make the final selection from nominations submitted by state societies affiliated with the National Society.

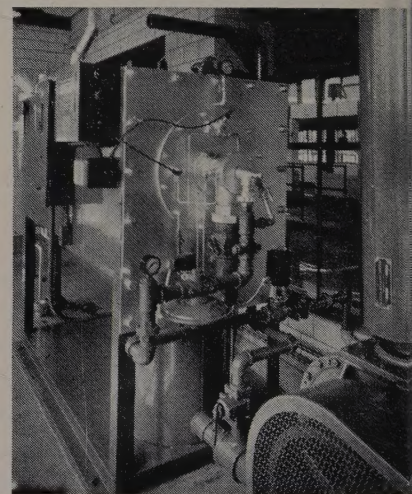
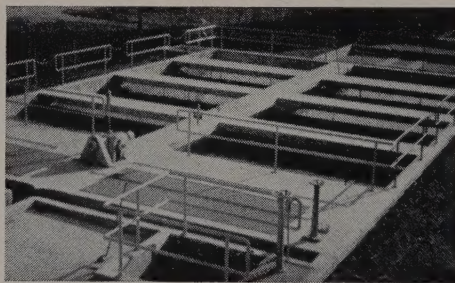
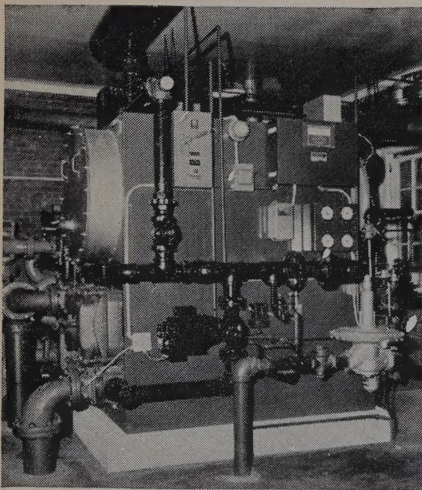
Five professional engineers in industry have been named to serve on the Award Committee. They are Robert A. Blackburn, manager, strategic materials sections, engineering and construction division, Kopp Company, Inc., chairman; Louis J. Larson, consulting engineer, Welding Industries Group, Allis-Chalmers Manufacturing Company; Wayne E. Ault, manager, technical department, "Automatic" Sprinkler Corporation of America; George Steven, general manager, Worthington Corporation; and R. F. Danner, vice president, research and development, Oklahoma Gas and Electric Company.

Among the engineering employment practices which will be considered for the award, according to Chairman Blackburn, are those relating to registration, education and technical training, technical and professional society membership, engineers as authors, professional working conditions, utilization, engineering titles, and engineering management communications.

# WALKER PROCESS

## engineers and manufacturers of equipment for . . .

# water, waste and sewage treatment



*Some of the Walker Process installations in Illinois:*

*Left—HEATX, digester sludge heater at Urbana-Champaign; Wilson & Anderson, Consulting Engrs.*

*Top—Rectangular Collectors at Morris; Baxter & Woodman, Consulting Engrs.*

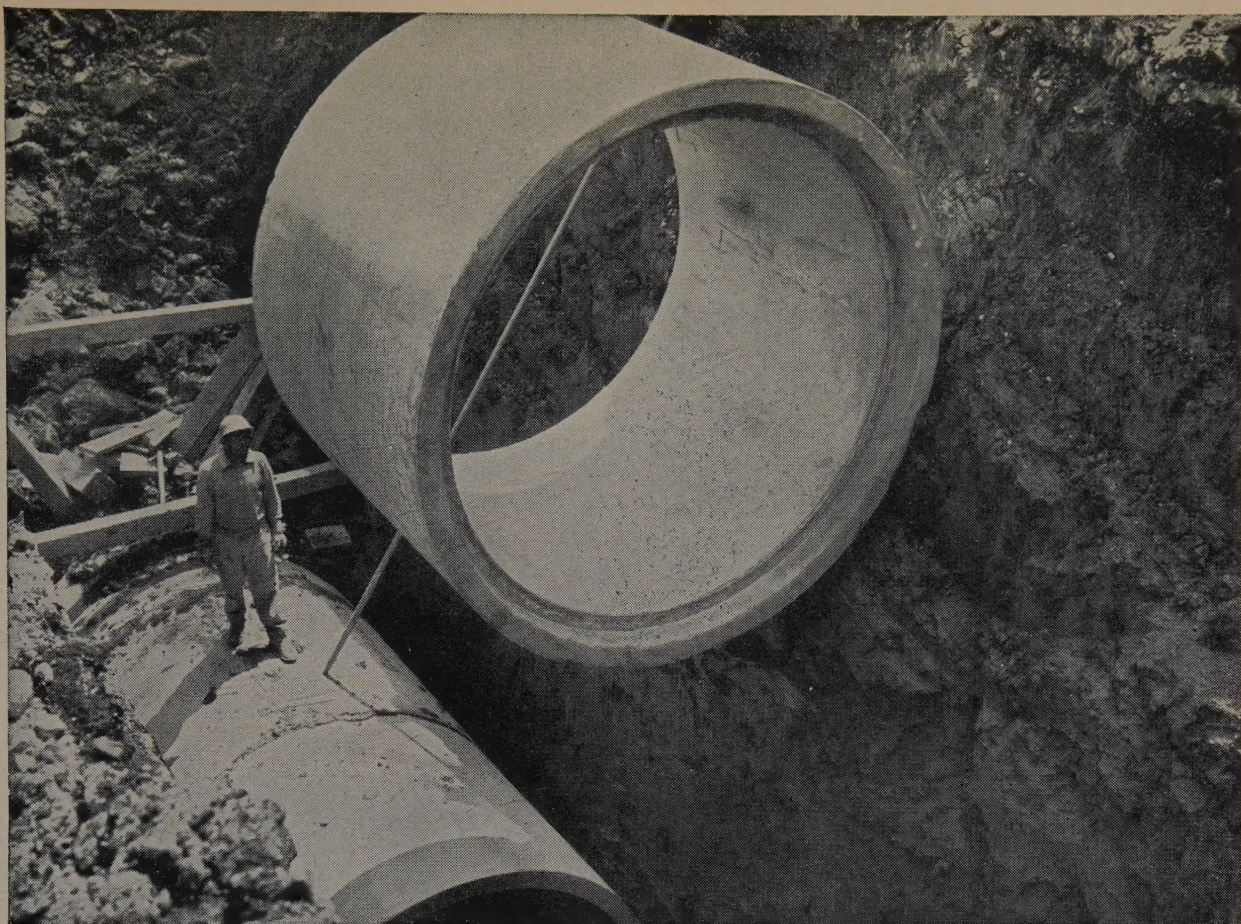
*Right—CARBALL, CO<sub>2</sub> producer at Moline; Greeley & Hanson, Consulting Engrs.*

Walker Process offers laboratory, engineering and manufacturing facilities to assist the consulting engineer and his clients in all problems regarding process equipment for the

handling and treatment of solids-in-liquids combinations. Write for recommendations as to process details and type of equipment best suited for your particular requirements.

## WALKER PROCESS EQUIPMENT INC. • Aurora, Illinois





*Section of 90" concrete pipe is swung into place easily and quickly*

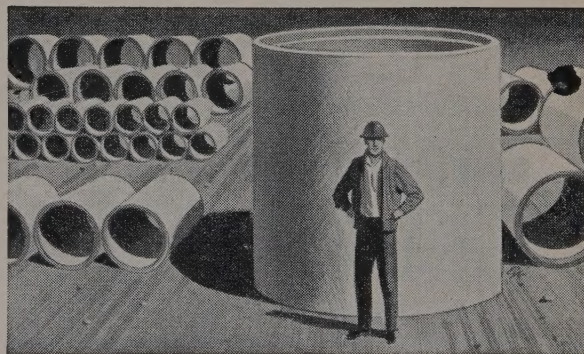
*For Chicago's newest sewers...*

## **concrete pipe provides maximum strength, greater capacity!**

To alleviate street and basement flooding, Chicago is carrying out a multi-million dollar enlargement of its combined sewer system.

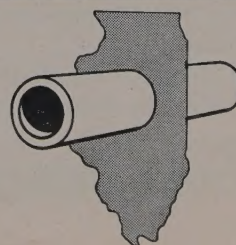
On the new Roscoe Street section, 12,500 feet of concrete pipe, 36" through 90" I.D., was used. Placed deep underground—an average of 27 feet for the 90" size—the pipe carries backfill and traffic load without further support. (A real time and economy advantage, too!) And resistance of the pipe to the overburden will increase because concrete gains strength year by year.

And maximum hydraulic capacity is provided by the smooth inner surface of concrete pipe. It resists abrasive wear. Concrete sewers, too, ensure minimum infiltration and leakage. Match all this with moderate first cost and you see why concrete pipe has a long record of solving difficult sewer problems for hundreds of municipalities.



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## SUMMARY OF NOVEMBER 7 BOARD MEETING

Minutes of September 12 Board meeting were approved with amendment relative to procedure on illegal practice cases.

National Directors reports include NSPE study of Civil Service laws regarding credit for engineering registration, policy on NSPE recognition of Student Chapters, and program at local chapter level prior to NSPE ballot on unity to be mailed January 27.

Board authorizes drafting of amendment on ISPE dues increase for 1961, to be voted on in 1960.

Chapter Constitutions previously approved on an interim basis given approval for coming six months.

Board approves resolution of Functional Section Committee for establishment of active Industrial Functional Section, with emphasis on St. Clair, Rockford and Chicago areas.

Chapter boundaries for Bloomington Area, Sauk Trail and Western approved.

Sixty-three applicants for ISPE membership approved, bringing total membership to approximately 3200.

Life Membership approved for Daniel A. Branigan and E. W. Carlson, both of Rock River Chapter.

Committee for 1960 Convention reports progress.

Diamond Jubilee Engineering Exposition Committee, under Charles Marr as Chairman, advanced \$1,000 for promotion and initial expenses for remainder of 1959. Engineers' Week to be devoted to promotion of the Exposition, expected to have visitation of 30,000 to 40,000.

Education Committee requests recommendation from each chapter for NSPE-Armco engineering scholarship.

W. M. Francis approved as Chairman of Interprofessional Relations Committee.

Publications Committee report accepted by Board. (See article elsewhere in this issue.)

ILLINOIS ENGINEER operation for 1959 will break even.

Nominating Committee report accepted. (See article elsewhere in this issue.)

Board adopts resolution memorializing Professor Thomas Clark Shedd.

Board appoints Ellis-Danner, Kenneth Welton and J. D. Voorhees as Representatives to the Illinois Engineering Council from January 1, 1960 to January 1, 1961.

Insurance Committee's recommendation to inaugurate New York Life Insurance group life program rejected by Board, and Committee discharged.

Policy Research Committee submits first statement for study and future consideration.

Utilization Conference for Engineers and Scientists

brochures to be mailed to all chapter officers and Board members. (See article elsewhere in this issue.)

President authorized to appoint committee to investigate laws for control of atomic energy and radioactive materials and installations.

The Board tabled the resignation of President McGowan and appointed Harold F. Sommerschield as Special Assistant, to supervise Operations Group Committees, which will allow First Vice President Hudson to assume duties of Acting President.

DuKane Chapter's proposed Constitution change approved, subject to review and approval of ISPE Constitution and Bylaws Committee; Northwest Suburban Chapter Bylaws change referred to ISPE Constitution and Bylaws Committee.

Awards Committee authorized to submit recommendation for NSPE Award.

Chapters urged to make recommendations to Awards Committee for NSPE Industrial Professional Development Award.



Shown at DuKane Chapter meeting, left, Rob Roy; right, R. H. Underhill.

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I-E



## NOMINATING COMMITTEE RECOMMENDATIONS

The Board of Direction accepted the following recommended slate of officers for 1960-61, submitted by the Nominating Committee on November 7, 1959:

OFFICE	TERM	CANDIDATE
President .....	1-year term beginning May 6, 1960.....	L. D. Hudson
Vice President.....	1-year term beginning May 6, 1960.....	Linus H. Brown
Vice President.....	1-year term beginning May 6, 1960.....	Harold F. Sommerschild
Vice President.....	1-year term beginning May 6, 1960.....	Manuel Garcia
Secretary .....	2-year term beginning May 6, 1960.....	John E. Housiaux
Treasurer .....	1-year term beginning May 6, 1960.....	R. D. Collins
National Director.....	1-year term beginning May 6, 1960.....	Melvin E. Amstutz
National Director.....	2-year term beginning May 6, 1960.....	Clifford E. Missman
National Director.....	2-year term beginning May 6, 1960.....	Frank W. Edwards
National Director.....	3-year term beginning May 6, 1960.....	William S. Gray
Illinois Engineering Council		
Representative.....	1-year term beginning Jan. 1, 1961.....	Kenneth E. Welton
I.E.C. Representative .....	2-year term beginning Jan. 1, 1961.....	J. D. Voorhees
I.E.C. Representative .....	3-year term beginning Jan. 1, 1961.....	R. H. Renwick

### NOMINATING COMMITTEE

— William G. Collins; Willard Flagg; Dale V. Hammond; George L. Sodemann; Rex V. Woodward; F. S. Wylie, Jr.; C. J. McLean, Chairman.

The above slate, plus nominations by petition, will be mailed to all Corporate Members of the Society between January 6 and February 6, 1960, with polls to close at 12:00 noon, March 14, 1960.

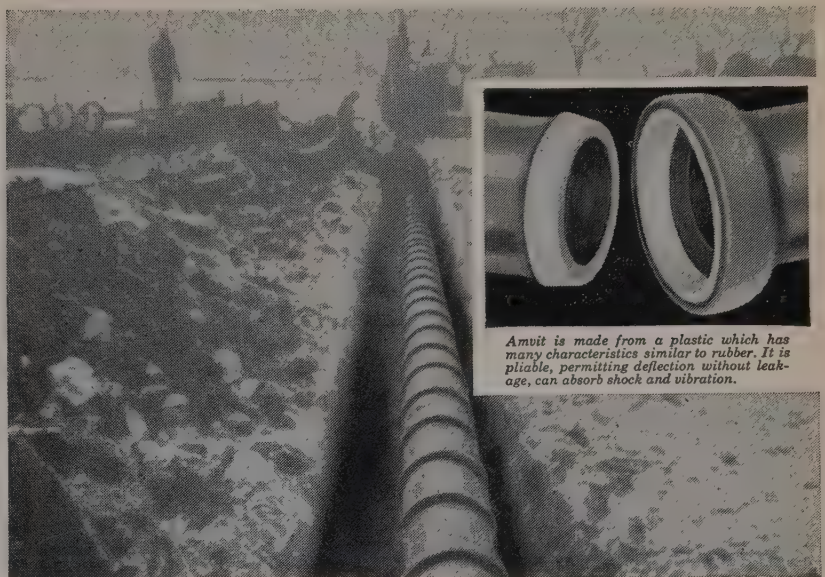
Nominations by petition, signed by not less than fifty Corporate members, shall be filed with the Secretary not later than four months prior to the annual meeting, or by January 6, 1960.

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**N.S.P.E. FALL MEETING, OCTOBER, 1959***By W. S. GRAY, National Director*

As usual at NSPE meetings, a great many committee reports were presented. It should be understood by all members that a widespread society as ours must utilize the committee system to its greatest advantage to accomplish its goals. NSPE very effectively uses this system.

If I may, I would like to discuss the Inter-Society Relations Committee report presented by Past President Garvin H. Dyer. The highlight of this report should be brought home to all members of ISPE as it calls for specific action by local chapters with a near future deadline. I am referring to the use of the UNITY KIT that has been distributed to all local chapter presidents.

The committee recommends that one meeting of the chapter be devoted to a discussion of the material in the Unity Kit. It sets a deadline of Jan. 1, 1960, preferably, or an absolute deadline of Feb. 1, 1960. It does so with a definite reason. Every member of NSPE will be asked to ballot his opinions regarding the unity problem.

The January issue of *AMERICAN ENGINEER* will have tear-out sheets of unity material. These, combined with the chapter meeting will, it is hoped, enable the average member to intelligently vote on two propositions:

1. What are its wishes on the fundamental questions relating to unity, and
2. Its wishes relating to opening its membership to nonregistered engineers, otherwise qualified by evidenced by holding suitable grades of membership in those societies that subscribe to ECPD uniform membership grade standards.

It is unknown at this time just how many questions there will be to ballot on nor in what form of ballot it will be.

The Inter-Society Relations Committee considers it imperative that the local chapter meeting have taken place prior to the balloting. The ballot will be mailed on January 23, 1960.

It would seem appropriate for our state office to send a reminder to all chapter presidents urging the scheduling of such a meeting at the earliest opportunity using the Unity Kit material already supplied.

Further detailed information is in the Committee Report—APPENDIX XXI.

**ON STUDENT CHAPTERS***By M. E. AMSTUTZ, National Director*

The first Student Chapter to become affiliated with the National Society of Professional Engineers was accepted at the Pittsburgh Board Meeting. This Chapter was organized as the University of Pittsburgh.

It was somewhat of a shock to many of us as we were under the impression that student chapters organized in other states, especially those in Ohio, had not been recognized by NSPE. We, however, learned that such are presently being taken in Ohio to comply with the standards set up by NSPE for affiliation and that within a short time the student chapters in that state, comprising over 700 students, will be admitted.

One of the requirements for affiliation of a student chapter is that they be in colleges of engineering having a curriculum or curricula of at least four years duration accredited by the Engineers Council for Professional Development.

The Committee on Student Chapters has under consideration the possibility of broadening the Student Chapter Program to permit the affiliation of chapters in schools not meeting this requirement. Considerable heated discussion ensued at the Board Meeting on this subject. Members of the Board who are presently faculty members at engineering schools appeared to be of the opinion that student chapters should only be organized in schools accredited by ECPD. Many of the board members who are practicing Professional Engineers took the opposite position and expressed the opinion that chapters be organized in all colleges and universities where courses are being offered that will lead to an Engineering Degree. Mr. J. B. Dannebaum, Director from Texas, felt that no delay should be encountered in broadening this program.

The AFL-CIO is presently working on all college levels in promoting the union view to the students and such endeavor is not limited only to schools accredited by ECPD.

Those favoring the broadening of the program feel that students should be indoctrinated with professional concepts beginning with their freshman year and that the program should be broad enough to cover all schools. In many instances students are attending local colleges that have made arrangements with some engineering school whereby the student takes Liberal Art Courses and Pre-Engineering Courses in his freshman and sophomore years and completes his education in the Engineering School with which the college is affiliated. Such students should not be deprived of the opportunity of becoming affiliated with a Student Chapter. This matter will be further debated at the Winter meeting in Wichita.

The undersigned is in favor of broadening the scope of the Student Chapter Program and would welcome the opinions of members of ISPE.



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## EXPANDED ILLINOIS ENGINEER PLANNED

The Publications Committee has planned an expansive program for the ILLINOIS ENGINEER during 1960. In the development of the overall 75th Diamond Jubilee program of the Society, the committee plans an exploitation by increasing circulation to non-member engineers with a goal of 10,000 copies of the Convention issue to be distributed in April.

The Committee foresees a new format for the magazine which will develop greater reader interest. To implement this phase of the expansion, the committee solicits ideas from the membership in the form of new cover designs and interior layout suggestions.

The Committee has recommended to the Board that an Annual Directory issue be published and distributed each August, that annual committee reports be consolidated with the Convention Issue, and that by 1961 a full-time managing editor be procured to handle the magazine publication.



Left to right: Neil D. French, Chairman Kenneth Welton, Warner A. Johnson and Harold M. Maxwell, of the Publications Committee of ISPE.

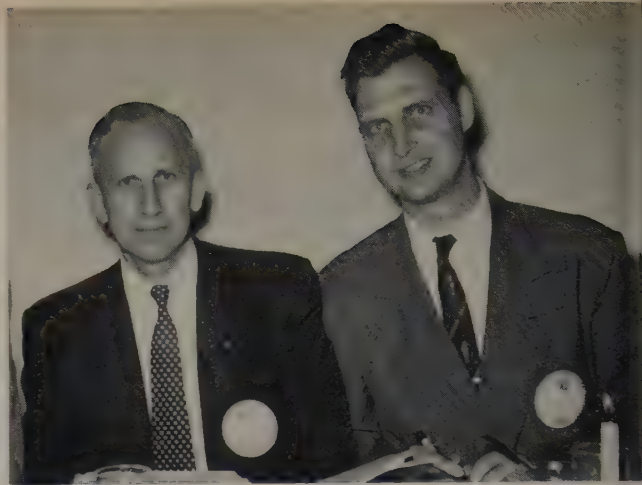
## EXPOSITION CHAIRMAN NAMED

The ISPE Board of Direction has named Charles Marr, of Capital Chapter (Springfield), as Chairman of the 75th Year Engineering Exposition, to be held the week in which the Society will hold its 75th Annual Meeting in Springfield next May.

Subcommittees have been named and are preparing an information brochure for prospective exhibitors and for use by chapters in attracting good attendance from throughout the state.

The theme of the exhibits will be "75 Years of Engineering Progress", and the category of the exposition will include the fields of communication engineering, transportation, farm equipment development, road building, aircraft and missile development.

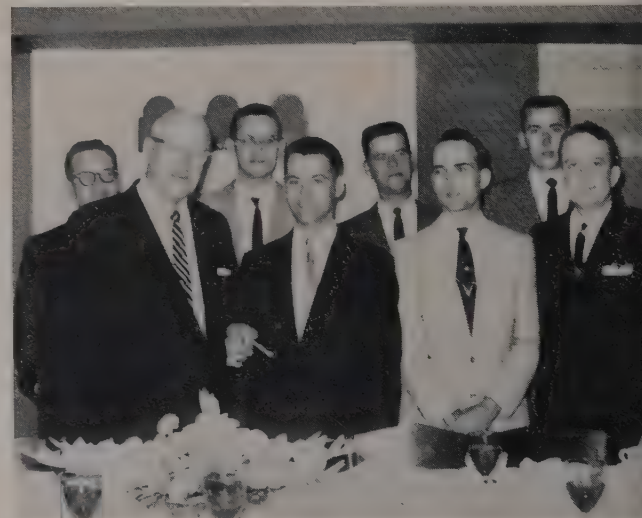
The General Chairman of the 75th Convention, William J. Downer, is ill at this time and we hope only temporarily. Until Downer can resume the duties of Convention Chairmanship, Gerald Margrave is seeing that plans made by the entire committee are carried on.



DuKane Chapter President John Fast, left; right, W. Deuchler, Secretary-Treasurer.



Pictured, left to right, Mrs. James H. Rowell, Mrs. Steward C. Hutchison, Mrs. Alan Freeburg. In the back row: Professional Engineer James H. Rowell, Philip Hutchison, legal adviser to the Department of Registration and Education, Probate Judge Steward C. Hutchison and Professional Engineer Alan Freeburg.



Pictured at Joliet Chapter Recognition Dinner, left to right in the front row: Philip Hutchison, technical adviser to the Illinois Department of Registration and Education, Donald L. Vercelote, Richard B. Spangler and Probate Judge Steward C. Hutchison. Pictured, left to right in the back row: James H. Rowell, Herbert F. Nelson, Donald Morgan, and Ralph Yunker.



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# PROGRAM FOR UTILIZATION CONFERENCE

A Conference on Efficient Utilization of Engineers and Scientists will be held on December 1 and 2 at the Edgewater Beach Hotel, Chicago. Sponsored by Northwestern Technological Institute and the Illinois Society of Professional Engineers, the conference is under the auspices of the President's Committee on Scientists and Engineers, Office of Civil and Defense Mobilization, Washington. The program follows:

## PROGRAM

### TUESDAY, DECEMBER 1

9:00 A.M. Registration Lobby, Edgewater Beach Hotel  
10:00 A.M. Opening Session, "EXPLORATION"

Michigan Room  
Presiding: F. G. Seulberger, Conference Co-Chairman  
Assistant Dean, Technological Institute  
Northwestern University  
Evanston, Illinois  
Speakers: WELCOME  
Dr. Harold V. Hawkins, Conference Co-Chairman  
Assistant Director, Research Laboratory Division  
Cook Electric Company  
Morton Grove, Illinois  
UTILIZATION IS NECESSARY TO EMPLOYERS AND EMPLOYEES  
Paul H. Robbins, P.E., Executive Director,  
National Society of Professional Engineers  
Washington, D. C.  
HOW INDUSTRY AND EDUCATORS CAN MUTUALLY PROVIDE FOR UTILIZATION  
Ross Martin, Director, Engineering Experiment Station  
University of Illinois  
Urbana, Illinois

#### DEFINING THE PROBLEM

Dr. William G. Torpey, Consultant, Executive Office of The President  
Office of Civil and Defense Mobilization  
Washington, D. C.

#### DISCUSSION PERIOD

12:15 P.M. Luncheon Polynesian Village  
Presiding: F. G. Seulberger, Conference Co-Chairman  
Assistant Dean, Technological Institute  
Northwestern University  
Evanston, Illinois

Speaker: INDUSTRY'S RESPONSIBILITY TO "RIPEN" SCIENCE-ORIENTED ENGINEERS  
John Gammell, Director of Graduate Training  
Allis-Chalmers Company  
Milwaukee, Wisconsin

2:15 P.M. Concurrent Panel Sessions

#### SESSION I HOW ADMINISTRATIVE POLICIES HAVE IMPROVED UTILIZATION

Berwyn Room  
Moderator: R. E. Gibbs, Dean, College of Engineering  
Bradley University  
Peoria, Illinois  
ADMINISTRATIVE POLICIES DURING PERIODS OF GROWTH AND DIVERSIFICATION  
Dr. R. E. Henry, Manager of Chemical and Physical Laboratories  
Continental Can Company, Inc.  
Chicago, Illinois  
SELECTION TECHNIQUES FOR EFFECTIVE UTILIZATION OF TECHNICAL PERSONNEL  
W. C. van Dyck, Manager of Education and Training  
Caterpillar Tractor Company  
Peoria, Illinois  
IMPROVED WRITTEN COMMUNICATIONS  
Robert F. Marschner, Senior Research Associate  
Standard Oil Company (Indiana)  
Whiting, Indiana  
ADVANCEMENT FROM WITHIN AS INCENTIVES  
Wendell F. Wood, General Supervisor of Personnel Development  
International Harvester Company  
Chicago, Illinois  
DISCUSSION PERIOD

#### SESSION II EFFICIENT UTILIZATION THROUGH MOTIVATION

South Terrace  
Moderator: Carlos Hidalgo, Supervising Engineer  
The Stiles Company  
Waukegan, Illinois  
WHAT IS YOUR COMPANY'S CLIMATE?  
William Bright, Manager of Employee Development  
The Pure Oil Company  
Chicago, Illinois  
INDIVIDUAL MOTIVATION PROBLEMS OF ENGINEERS  
Milton Hanson, Training Director  
Abbott Laboratories  
North Chicago, Illinois  
THE "COMPANY MAN" ATTITUDE  
James P. Murphy, Partner, Crawford, Murphy & Tilly  
Consulting Engineers  
Springfield, Illinois  
CAREER SATISFACTIONS FOR ENGINEERS AND SCIENTISTS  
Paul H. Robbins, P. E.  
Executive Director The National Society of Professional Engineers  
Washington, D. C.  
DISCUSSION PERIOD

#### SESSION III UTILIZATION BY PROPER USE OF NON-PROFESSIONAL PERSONNEL

Marine Terrace  
Moderator: L. C. Goddard, Executive Director  
Illinois Society of Professional Engineers  
Springfield, Illinois  
NON-PROFESSIONALS IN HIGHWAY IMPROVEMENTS  
W. A. McCree, P. E.  
Engineer of Employee Training and Assignment  
Illinois Division of Highways  
Springfield, Illinois  
NON-PROFESSIONAL PERSONNEL, A NEW PROSPECTIVE  
John E. Housiaux, P.E.  
Consulting Mechanical Engineer  
Warren & VanPraag, Inc.  
Decatur, Illinois  
SEMI AND NON-PROFESSIONAL SUPPORT IN DESIGN AND DEVELOPMENT FOR INDUSTRY  
Clarence Armstrong, Assistant Director of Engineering  
Sangamo Electric Company  
Springfield, Illinois  
IMPROVED USE OF NON-PROFESSIONAL PERSONNEL AT PHILLIPS PETROLEUM COMPANY  
George F. Downs, Jr., Manager Design Division, Engineering Department  
Phillips Petroleum Company  
Bartelsville, Oklahoma  
DISCUSSION PERIOD  
6:00 P.M. Social Hour GET ACQUAINTED SESSION Ballroom  
Sponsored by The Illinois Concrete Pipe Association  
Dinner Ballroom  
Presiding: Dr. Harold V. Hawkins, Conference Co-Chairman  
Assistant Director, Research Laboratory Division  
Cook Electric Company  
Morton Grove, Illinois  
POLITICS AND UTILIZATION  
Speaker: Distinguished Political Speaker  
To Be Announced



10 A.M. Concurrent Panel Sessions

**SESSION IV HOW NATIONAL "CRASH PROGRAMS" AFFECT UTILIZATION**

**Moderator:** William T. Hooper, Vice-President  
Illinois Society of Professional Engineers  
Principal, Consultant Firm,  
William T. Hooper  
Lake Forest, Illinois

**WEAPONS SYSTEM CONTRACT AWARDS**  
James M. Bridges, Director of Electronics  
Office of Assistant Secretary of Defense for  
Research and Engineering  
Washington, D. C.

**HOW THE AVAILABILITY OF SCIENTIFIC  
AND ENGINEERING MANPOWER AF-  
FECTS GOVERNMENT CONTRACTING**  
Lt. Colonel James R. Mills, Jr., Commanding  
Officer, The Chicago Ordnance District  
United States Army  
Chicago, Illinois

**HOW CONSULTANTS BRIDGE GAP IN GOV-  
ERNMENT ENGINEERING**  
John Clarkeson  
Clarkeson Engineering Company  
Boston, Massachusetts

**DISCUSSION PERIOD**

**SESSION V EFFECTIVE TRAINING PROGRAMS** Lincoln Room

**Moderator:** Dr. H. B. Gotaas, Dean Technological Institute  
Northwestern University  
Evanston, Illinois

**SIGNIFICANT CHANGES IN ENGINEERING  
& SCIENTIFIC CURRICULA**  
Ray D. Meade, Director  
Racine Technological Institute  
Racine, Wisconsin

**IN-PLANT PROGRAMS**  
Dale Atkins, Director of Employee Development  
Argonne National Laboratories  
Lemont, Illinois

**GRADUATE ENGINEERING PROGRAMS IN  
AN INDUSTRIAL COMMUNITY**  
Kurt H. Schiffler, Administrative Engineer  
Sunstrand Aviation Company  
Rockford, Illinois

**DISCUSSION PERIOD**

**SESSION VI ENGINEERS AND SCIENTISTS VIEWPOINT OF MAN-  
AGEMENT POLICIES** Michigan Room

**Moderator:** R. D. Maxson, Consultant,  
Sargent & Lundy, Engineers  
Chicago, Illinois

**ENGINEERS AND SCIENTISTS REQUIRE "PER-  
SONAL" POLICIES**  
Dr. C. E. Barthel, Assistant Director  
Armour Research Foundation  
Chicago, Illinois

**WHAT THE SCIENTIST THINKS OF MANAGE-  
MENT POLICIES**  
Dr. Louis A. Turner, Deputy Director  
Argonne National Laboratory  
Lemont, Illinois

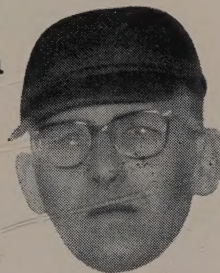
**THE ENGINEER ASKS "WHO IS MANAGE-  
MENT"**  
J. F. Collins, P. E.  
Central Office Programming Engineer  
Illinois Bell Telephone Company  
Chicago, Illinois

**DISCUSSION PERIOD**  
South Terrace

**12:15 P.M. Luncheon**  
**Presiding:** Dr. Harold V. Hawkins  
**Speaker:** SUMMARY HIGHLIGHTS OF THE CONFER-  
ENCE

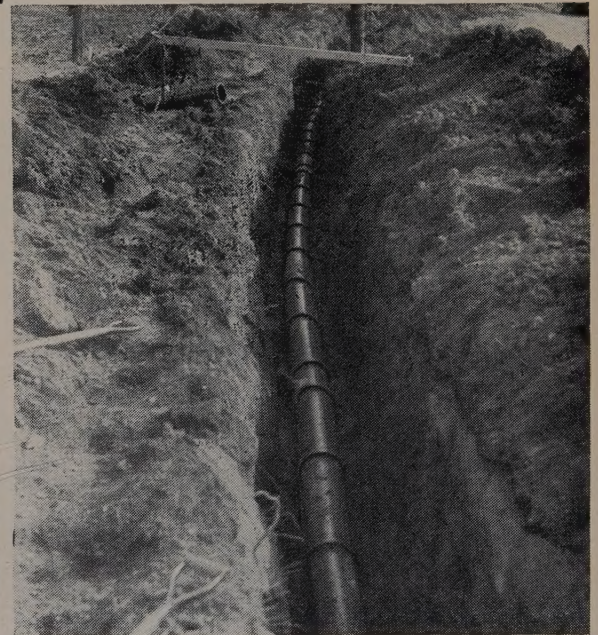
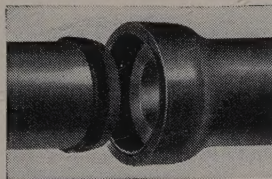
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Executive Office of The President  
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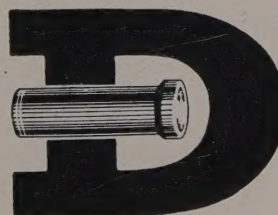


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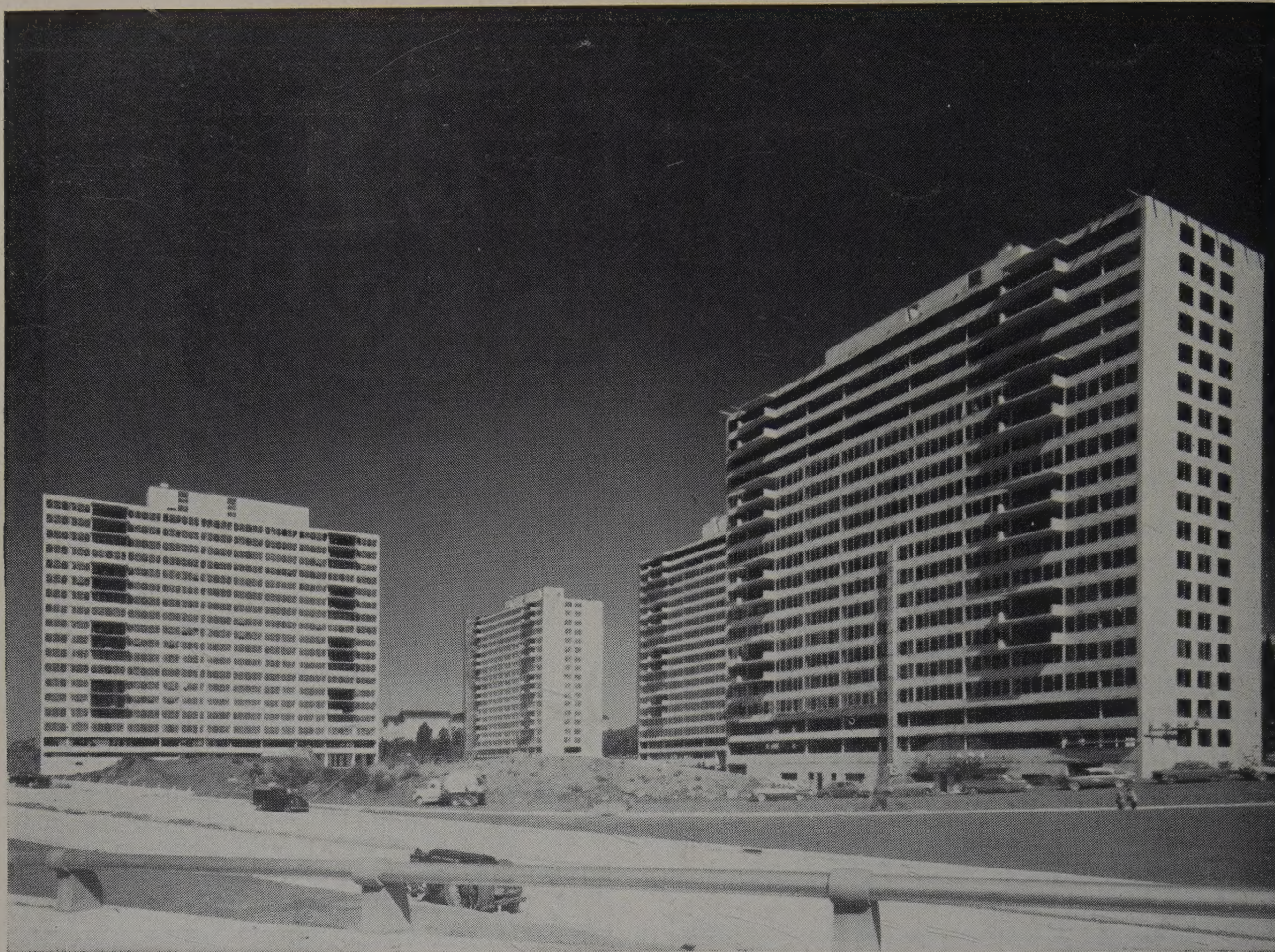
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